PETRONAS GAS BHD v. DWZ INDUSTRIES (JOHOR) SDN BHD & ANOR

HIGH COURT MALAYA, JOHOR BAHRU
SEE MEE CHUN J
[CIVIL SUIT NO: JA-22NCVC-204-10-2016]
8 APRIL 2019

TORT: *Negligence – Damages – Land use expressed to be for gas and petroleum substance gaslines and related facilities – Industrial effluent from adjoining land causing damage to pipeline – Whether neighbouring factory released industrial effluent into land – Whether discharge from neighbouring factory could reach pipeline – Whether neighbouring factory owed duty of care to land owner – Failure to take reasonable care in preventing highly acidic industrial effluent from being discharged into land – Whether there was breach of duty of care*

TORT: *Trespass – Trespass to land – Land use expressed to be for gas and petroleum substance gaslines and related facilities – Industrial effluent from adjoining land causing damage to pipeline – Whether neighbouring factory constructed fitting on land without consent – Whether neighbouring factory released industrial effluent into land – Whether neighbouring factory liable for trespass*

The plaintiff company's principal business was separating natural gas into components and transporting, distributing such components and sale of industrial utilities. The first defendant, a wholly-owned subsidiary of the second defendant, was in the business of providing surface finishing for metal parts for electric and electronic industries as well as providing a wide range of cleaning, washing and electroplating services to contract manufacturers. The second defendant has essentially the same nature of business as the first defendant. The plaintiff was the owner of leasehold land in Mukim Plentong Johor Bahru ('plaintiff's land'). The land use was expressly for gas and petroleum substance gaslines and related facilities. There was in place a Peninsular Gas Utilisation ('PGU') system for the transmission of piped sales gas by the plaintiff for Petronas which consisted of more than 2500 km of main and lateral pipelines. The PGU Phase II Sector 3 pipeline network from Segamat to Plentong ('pipeline') was constructed below ground and it goes through the plaintiff's land. The second defendant was the owner of a freehold land occupied by the first defendant to run a factory, which was adjacent to the plaintiff's land and pipeline. On 4 October 2015, the plaintiff was notified of a sand/gas cloud coming from under the ground of the plaintiff's land (leakage site, first leaking incident). It was discovered that there was a leakage in the pipeline at Field Joint Pipe KP-197 ('damaged pipe'). The pipeline was decommissioned and excavation works were carried out. It was subsequently discovered that a section at the bottom of the damaged pipe at Field Joint Z75 ('Z75') had ruptured. Water and some foreign liquid substance ('industrial effluent') seeped out of several locations of the walls of the excavated area. A hole was also discovered in the trench

wall which was about 2 inches wide ('hole'). The hole was located 12m upstream from Z75 and industrial effluent was seeping out. On 21 October 2015, the plaintiff, in the presence of the Department of Environment ('DOE'), discovered an underground fitting ('fitting') on its land. It comprised a covered underground sump ('outside sump') which was connected by a PVC pipe and a flexible hose to the side wall of the factory. Inside the factory, directly behind the side wall, was an underground sump ('inside sump'). The inside sump had untreated water of pH1 and a pH testing of the fluid in the outside sump had a pH2, which showed that it was acidic. From the outside sump, a separate 4 inches PVC pipe ran parallel to the pipeline for about 50m before ending at the nearby river. It was not disputed that other than Z75, the other point that was damaged was at Z74. On 29 July 2016, in the course of maintenance work at the leakage site, it was discovered that water and industrial effluent was seeping out at several locations of the walls of the excavated area into the plaintiff's land ('second leaking incident'). It was not disputed that the parameters for acidity included the presence of sulphates, nitrates and chlorides. The plaintiff therefore, claimed against the defendants for negligence, nuisance, trespass and/or breach of statutory duties by the defendants essentially arising from the discharge of industrial effluents from the factory through an illegal by-pass thereby damaging the pipeline. The defendants' defence was that the damage to the pipeline was due to the absence of a heat shrink sleeve ('HSS') and the naturally acidic nature of the soil and, if liability was established, it did not fall on the second defendant. The primary issue was whether it was the defendants that had released the industrial effluent into the plaintiff's land and whether that had caused the damage to the damaged pipe.

Held (allowing plaintiff's claim against defendants):

(1) There were three EQA charges against the first defendant. These were specifically related to discharging industrial effluent at the level of pH1 beyond the allowable limit of between 5.5 to 9.0, nickel content with a concentration of 50mg/l beyond the allowable limit of 1.0 mg/l and zinc content concentration of 31mg/l beyond the allowable limit of 2.0 mg/l. While these charges were not related to the fitting at the back of the factory, these showed the discharge of industrial effluent at the level of pH1 and high content of nickel and zinc, which heavy metals were also found in the vicinity of the damaged pipe. It also rendered it probable, as suggested in the Ramboll report, the presence of anthropogenic sources in the form of release of industrial effluents exacerbated the already acidic condition. DW2, the Executive Director and General Manager of the first and second defendants, had agreed to not running the first defendant's waste water treatment plant very well and not complying with regulations and conditions imposed by DOE. The first defendant was thus found to have released the industrial effluents into the plaintiff's land. (paras 22-24)

(2) The second defendant was directly involved in the operations of the first defendant's factory. The second defendant was the owner of the land on which the factory was located as well as the factory itself thereby being responsible for the escape of industrial effluent. Both defendants had two common directors with DW2 being the executive director and general manager of both the defendants. Therefore, based on the facts of the involvement of the second defendant in the operations of the factory of the first defendant, the second defendant was liable along with the first defendant. (paras 25 & 26)

(3) The evidence by the plaintiff's witness, PW4, with reference to the pigging report February 2015 was that Z74 had no anomaly, but in October 2015 there was extensive damage. For Z75, the girth weld anomaly *vis-a-vis* corrosion damage with depth of 22% was within acceptable range. The corrosion was caused by something other than the normal soil surrounding the pipe. The report by SIRIM made reference to the presence of significant nitrates and sulphates and major contents of fluorides and chlorides with their pH less than 2.6, *ie*, severely acidic. It further stated that the environment surrounding FJZ75 and FJZ74 were strongly acidic and contained hydrocarbon compounds. The conclusion was that 'The pipe failed due to an external induced corrosion causing accelerated thinning of the pipe wall. The acidic discharge liquid may probably be the source of the external corrosion'. The acidic industrial effluent and its discharge was the 'something else' which led to the damage of the damaged pipe. It was probable that the discharge would have reached the pipeline, given that the groundwater flow had enough velocity to reach both Z74 and Z75. It was not probable for the damage to have been caused by the naturally acidic conditions of the soil from the re-vegetation of former palm oil plantations. (paras 27-30 & 36)

(4) It is trite law that the elements of duty of care, breach, loss and damage must be established in a claim for negligence. The defendants owed a duty of care to the plaintiff as the owner or occupier of the adjoining land. The defendants had breached its duty of care when it failed to take reasonable care in preventing highly acidic industrial effluent from being discharged into the plaintiff's land. Furthermore, the defendants had also deliberately, without obtaining the plaintiff's permission, encroached and/or trespassed onto the plaintiff's land to construct the fitting for the sole purpose of discharging untreated industrial effluent in contravention of the EQA. The defendants also had not taken care of the fitting which had a broken outside sump as well as the inside sump which had cracks in the acid resistant fibre glass lining. The breach of this duty of care led to damage to the damaged pipe. (paras 38-40)

(5) Trespass to land was defined as 'Every unlawful entry by one person on land in the possession of another is a trespass for which an action lies, although no actual damage is done. ... or sends filth or any injurious substance which has been collected by him on his own land on to another's land' (*Halsbury's Law's of England* (3rd edn) Vol. 38). In the instant case, the defendants constructed the fitting on the plaintiff's land without consent and discharged the industrial effluent from the fitting. Private nuisance is the unreasonable interference with another's use or enjoyment to the land. Given that the defendants had been found liable on trespass which was actionable *per se* without proof of special damage, this claim for private nuisance was, at best, in the alternative. (paras 40, 42, 43 & 45)

(6) The defendants were also liable under the rule of strict liability as established in *Rylands v. Fletcher*. There must also be a non-natural use of the land where it has to be 'some special use bringing with it increased danger to others and must not merely be the ordinary use of the land or such a use as is proper for the general benefit of the community'. The collection of highly acidic industrial effluent in the inside sump amounted to the accumulation on the defendant's land of something likely to do mischief if it escaped. The act of constructing and using a by-pass to avoid industrial effluent from being treated in the WWTP and instead of diverting it to nearby inland waters through the construction of the fitting on the plaintiff's land clearly amounted to the non-natural use of the defendant's land. Therefore, the defendants were liable under the strict rule in *Rylands v. Fletcher*. (paras 46-48)

(7) The loss and damage claimed by the plaintiff under para. 46 of the re-amended statement of claim was for: (i) cost of remedial works consumable items and raw material; (ii) cost of the plaintiff's man-hours expended; (iii) cost of replacement of the damaged pipe; (iv) cost of pigging work; (v) cost of permanent repair works on the said pipeline; (vi) SIRIM's report; (vii) Ramboll's report; (viii) Es Techventure's report; and (ix) cost of land clearing. The court allowed the claims for loss and damage for all the items set out in paras. 46 (i) - (viii). However, the cost of land clearing was dismissed as there was no evidence of such work being carried out. The plaintiff's claim in para. 47 of the re-amended statement of claim was allowed in part. (paras 56, 82, 84 & 85)

Case(s) referred to:

Aik Ming (M) Sdn Bhd & Ors v. Chang Ching Chuen & Ors And Another Case [1995] 3 CLJ 639 CA ***(refd)***

Ellis v. Loftus Iron Co (1874) LR 10 CP 10 ***(refd)***

Hiap Lee (Cheong Leng & Sons) Brickmakers Ltd v. Weng Lock Mining Co & Ltd [1974] 2 MLJ 1 ***(refd)***

Law Kam Loy & Anor v. Boltex Sdn Bhd & Ors [2005] 3 CLJ 355 CA ***(refd)***

Lucky Alame & Ors v. Royal Dutch Shell Plc & Shell Petroleum Development Company of Nigeria Ltd & Anor Appeal [2018] EWCA Civ 191 ***(refd)***
Projek Lebuh Raya Utara-Selatan Sdn Bhd v. Kim Seng Enterprise (Kedah) Sdn Bhd [2013] 6 CLJ 958 CA ***(refd)***
Rookes v. Barnard [1964] AC 1129 ***(refd)***
Rylands v. Fletcher (1866) LR 1 Ex 265 ***(refd)***
Sabah Shell Petroleum Co Ltd & Anor v. The Owners Of And/Or Any Other Persons Interested In The Ship Or Vessel The 'Borcos Takdir [2012] 1 LNS 1116 HC ***(refd)***

Legislation referred to:
Environmental Quality Act 1974, s. 25(1)

Other source(s) referred to:
Clerk & Lindsell on Torts, 17th edn, pp 97, 909

For the plaintiff - Ivan Loo, Shannon Rajan, Tatvaruban Subramaniam & Eric Gomez; M/s Skrine
For the defendants - Arun Krishnalingam & Aaron Siva; M/s Sativale Mathew Arun

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JUDGMENT

See Mee Chun J:

Introduction And Parties

[1] The plaintiff is a public listed company limited by shares with the principal business of separating natural gas into components and transporting, distributing such components and sale of industrial utilities. The first defendant is in the business of providing surface finishing for metal parts for electric and electronic industries as well as providing a wide range of cleaning, washing and electroplating services to contract manufacturers. The second defendant has essentially the same nature of business as the first defendant. The first defendant is a wholly-owned subsidiary of the second defendant.

[2] The plaintiff is the owner of leasehold land HSM No. 4144 Lot No. 163692 Mukim Plentong Johor Bahru (plaintiff's land). The land use was expressly for gas and petroleum substance gas lines and related facilities. There is in place a Peninsular Gas Utilisation (PGU) system for the transmission of piped sales gas by the plaintiff for Petronas which consists of more than 2500km of main and lateral pipelines. The PGU Phase II Sector 3 pipeline network from Segamat to Plentong (pipeline) was constructed below ground and it goes through the plaintiff's land.

[3] The second defendant is the owner of freehold land HSD No. 331228 Mukim Plentong Johor Baru (second defendant's land). The first defendant occupies and runs a factory at No 30 Jalan Maju 1, Taman Perindustrian Desa Cemerlang, Ulu Tiram Johor Bharu (factory) located on the second defendant's land. The factory is adjacent to the plaintiff's land and pipeline.

A **The Claim**

[4] The plaintiff's claim is for negligence, nuisance, trespass and/or breach of statutory duties by the defendants essentially arising from the discharge of industrial effluents from the factory through an illegal bypass thereby damaging the pipeline.

B

[5] The defence was that the damage to the pipeline was due to the absence of a heat shrink sleeve (HSS) and the naturally acidic nature of the soil and if liability was established, it did not fall on the second defendant.

Background Facts

C

[6] On 4 October 2015 at about 10am, the plaintiff was notified of a sand/gas cloud coming from under the ground of the plaintiff's land (leakage site, first leaking incident). It was discovered there was a leakage in the pipeline at Field Joint Pipe KP-197 (damaged pipe). The pipeline was decommissioned and excavation work carried out. It was subsequently
D discovered a section at the bottom of the damaged pipe at Field Joint Z75 (Z75) had ruptured. Water and some foreign liquid substance (industrial effluent) was seeping out of several locations of the walls of the excavated area. A hole was also discovered in the trench wall which was about 2 inches wide (hole). The hole was located 12m upstream from Z75 and industrial
E effluent was seeping out.

[7] On 21 October 2015, the plaintiff discovered an underground fitting (fitting) on its land. It comprised a covered underground sump (outside sump) which was connected by a PVC pipe and a flexible hose to the sidewall of the factory. Inside the factory directly behind the sidewall was an
F underground sump (inside sump). From the outside pump, a separate 4 inches PVC pipe ran parallel to the pipeline for about 50m before ending at the nearby river.

[8] On 29 July 2016, in the course of maintenance work at the leakage site it was discovered that water and industrial effluent were seeping out at
G several locations of the walls of the excavated area into the plaintiff's land (second leaking incident).

Issue

[9] The primary issue is whether it was the defendants that released the
H industrial effluent into the plaintiff's land and whether that caused the damage to the damaged pipe.

[10] The witnesses for the plaintiff were:

(i) Mohd Farid bin Mohd Yusoff @ Abdullah (Pipeline Executive, PW1
I and witness statement marked as WSP1);

(ii) Mohd Nazri bin Ahmad (Staff Engineer (Pipeline Integrity), PW2 and witness statement marked as WSP2);

(iii) Ahmad Muhaimin bin Abdullah (Pegawai Kawalan Alam Sekitar, Department Environment, PW3);

(iv) Amirul Mukmin bin Abdullah (Corrosion Executive, Integrity Assurance Section, Technical Service Department, PW4 and witness statement marked as WSP4 and WSP4A);

(v) Farid Mahfuz bin Abd Halim (Pipeline Executive, Pipeline Integrity Section, Engineering Department, PW5 and witness statement marked as WSP5);

(vi) Mohd Syazwan bin Ramlan (Pipeline Executive, Pipeline Integrity Section, Engineering Department, PW6 and witness statement marked as WSP6);

(vii) Dr Hasnah binti Abdul Wahab (PW7, SIRIM and who prepared the report on underground field joint 197Z75, KP197 dated 8 January 2016 and affidavit dated 7 March 2018);

(viii) Pirabagaran Balasingham (PW8, Ramboll Malaysia Sdn Bhd (Ramboll) and who prepared the environmental site assessment report dated 7 September 2017, reply report dated 5 March 2018, groundwater monitoring event report dated 20 February 2018 reply report dated 7 March 2018 and affidavit dated 7 March 2018; and

(ix) Lily Suryani binti Yusof (PW9, ES Techventure Sdn Bhd and who prepared the water & soil effluent monitoring report dated 24 May 2017 and effluent water, groundwater and soil monitoring report dated 1 November 2017 and affidavit dated 13 June 2018.

[11] The witnesses for the defendants were:

(i) Wong Fook Wing (DW1, Principal Environmental Consultant, Envitech Water Sdn Bhd and witness statement marked as WSD1);

(ii) Teoh Kim Guan (DW2, Executive Director and General Manager of the first and second defendants until 15 December 2016 and non executive director and witness statement marked as WSD2); and

(iii) Chang Hee Kuan (DW3, Principal Consultant, Astar Laboratory Pte Ltd (Astar) and who prepared the report soil & groundwater contamination survey dated 13 February 2018 and reply report dated 27 March 2018, affidavit dated 28 February 2018 and supplementary affidavit dated 20 May 2018).

Undisputed Facts

[12] It was not disputed that other than Z75, the other point that was damaged was at Z74; that Z75 is further away from the factory than Z74 and that only Z75 suffered a rupture.

[13] On 8 May 2016, the first defendant was charged for offences under the Environmental Quality Act 1974 (EQA) for offences committed under s. 25(1) on 21 October 2016 at the factory. Altogether there were three charges of which two charges related to the discharge of industrial effluents beyond the allowable limit and one for discharging industrial effluent into inland waters *via* a bypass. Refer to B9/119-123. The first defendant pleaded guilty to these charges.

Liability

Release Of Industrial Effluent

[14] The discovery of the fitting by the plaintiff was in the presence of the Department of Environment (DOE). This fitting connected to the back of the factory. As per the evidence of DW2, the inside sump directly behind the fitting was to store untreated water and he agreed this was constructed without the consent of the landowner (NOP 20-6-2018/23-25). DW2 had also confirmed the fitting was used to transport the industrial effluent (NOP 20-6-2018/38).

[15] It was from this fitting and the outside sump and inside sump that the industrial effluent was eventually released into the plaintiff's land. This was because the outside sump was broken such that the industrial effluent would be discharged into nearby land as confirmed by DW2 (NOP 20-6-2018/40). Further, the bottom of the inside sump was cracked whereupon the first defendant had carried out rectification work. It follows too the industrial effluent could have been released into the soil underneath the sump pit (NOP 20-6-2018/49).

[16] The inside sump had untreated water of pH1. A pH testing of the fluid in the outside sump had a pH2. These showed it to be acidic.

[17] It is not disputed the parameters for acidity includes the presence of sulphates, nitrates and chlorides.

[18] An environmental site assessment (ESA) was carried out at the leakage site by Ramboll. The study area was generally flat with a downward slope from North to South. Three reports were issued. Noteworthy was its first report dated 7 September 2017 which among others stated as follows:

> Soil Analytical Result
>
> _ pH levels detected in the soil samples collected from the study area ranged between 4.11 and 5.36, indicating an acidic condition;
>
> _ Heavy metal such as chromium, lead, mercury, nickel and zinc were detected in soil sample collected from the study area ...
>
> ...

Groundwater Analytical Results

- pH levels detected in the groundwater samples collected from the study area ranged between 5.44 and 7.42, indicating slightly acidic condition to neutral condition;
- Arsenic was detected in groundwater samples UTMW3, UTMW5, UTMW6 and UTMW7 (duplicate sample of UTMW3), ...

(PW8 affidavit/13].

[19] On the arsenic, Ramboll's second report dated 20 February 2018 stated that while arsenic may not have been discharged into the soil, the presence of anthropogenic sources could have exacerbated the already acidic condition. One such source was the release of industrial effluent from the factory. (PW8 affidavit/121)

[20] With regard to the contention that the presence of the heavy metals being naturally occurring, that can only be probable if the entire area had similar concentrations of the heavy metals. However, this was not the case given that the highest concentration of nickel and arsenic were found in the test locations closest to the factory.

[21] Further, SIRIM had also analysed eight liquid samples of the industrial effluent and three soil samples taken from the leakage site. Its report dated 8 January 2016 indicated that the liquid samples revealed the presence of significant nitrates and sulphates and major contents of fluorides and chlorides with their pH less than 2.6 ie, severely acidic. The pH of the soil samples, 2m upstream of joint FJZ75 measured 3.66 while those within the vicinity of FJZ74 measured between 2.36 to 2.71. [All in PW7 affidavit/114]

[22] As stated earlier, there were three EQA charges against the first defendant. These specifically related to discharging industrial effluent at the level of pH1 beyond the allowable limit of between 5.5 to 9.0, nickel content with a concentration of 50mg/l beyond the allowable limit of 1.0 mg/l and zinc content concentration of 31mg/l beyond the allowable limit of 2.0 mg/l. While these charges were not related to the fitting at the back of the factory, these showed the discharge of industrial effluent at the level of pH1 and high content of nickel and zinc, which heavy metals were also found in the vicinity of the damaged pipe. It also renders it probable as suggested in the Ramboll report the presence of anthropogenic sources in the form of release of industrial effluents exacerbated the already acidic condition.

[23] DW2 had agreed to not running the first defendant's waste water treatment plant (WWTP) very well and not complying with regulations and conditions imposed by DOE. In fact, the question posed to him in the context of non-compliance was as follows:

Question:

You actually didn't comply with a lot of regulations and conditions imposed by DOE on the first defendant factory otherwise there wouldn't be untreated effluent being discharged. Isn't it?

Answer:

I agree ... .

(All in NOP 20-6-2018/37-38)

[24] The court thus finds that the first defendant had released the industrial effluent into the plaintiff's land.

Involvement Of The Second Defendant

[25] From the evidence, it is the court's finding the second defendant was directly involved in the operations of the first defendant's factory. Both were involved in the same nature of business. The second defendant was the owner of the land on which the factory is located as well as the factory itself thereby being responsible for the escape of industrial effluent. Both defendants had two common directors with DW2 being the executive director and general manager of both defendants too. DW2 said, he oversaw the day to day operations of the first defendant and the second defendant would thus be aware of the operations of the first defendant through DW2. In fact, DW2 had confirmed the second defendant would be aware of the operations of the WWTP in the factory and the first defendant's factory operations (NOP 20-6-2018/8). Further the Wastewater Characteristics Study which was carried out by Envilab S/B was carried out for the second defendant (B5/47&49) and the raw effluent samples for the WWTP was obtained from the second defendant (B5/30, para. 5.2). Mr Syarri Yusuff who was instructed to stop the first defendant's operations on 15 October 2016 and was present too on 21 October 2016 was the quality assurance manager of the second defendant. This can be seen in the name card in B1/8.

[26] All these facts point towards the involvement of the second defendant in the operations of the factory of the first defendant. It would thus be liable along with the first defendant. The legal premise of the liability will be dealt with subsequently.

Whether It Was The Release Of The Industrial Effluent That Damaged The Damaged Pipe

[27] The evidence of PW4 with reference to the Pigging Report February 2015 was that Z74 had no anomaly but in October 2015 there was extensive damage. For Z75 the girth weld anomaly *vis a vis* corrosion damage with depth of 22% was within acceptable range. As the rate was over a period of ten years, the original thickness of the pipe at 10.9mm gets thinner by 0.24mm per year. The average corrosion rate works out to 10.9mm x 22%

+ 10 years = 0.2398mm. As at February 2015, the thickness of Z75 was 8.5mm (10.9mm - 2.398mm) and by October 2015, the thickness was 1.75mm. Using the rate of thinning at 0.24mm per year, it would have taken 28 years for the thickness to reach 1.75mm whereas it took about eight months (QE & EA 25 WSP4A). According to him, the corrosion was caused by something other than the normal soil surrounding the pipe.

[28] As stated earlier, the SIRIM report made reference to the presence of significant nitrates and sulphates and major contents of fluorides and chlorides with their pH less than 2.6 ie, severely acidic. It further stated that the environment surrounding FJZ75 and FJZ74 was strongly acidic and contained hydrocarbon compounds. The conclusion was that "The pipe failed due to an external induced corrosion causing accelerated thinning of the pipe wall. The acidic discharge liquid may probably be the source of the external corrosion".

[29] This then, ie, the acidic industrial effluent and its discharge, was the something else which led to the damage of the damaged pipe. (PW7 affidavit/15).

[30] It was probable the discharge would have reached the pipeline given that the groundwater flow had enough velocity to reach both Z74 and Z75. The interactive groundwater modelling relied on by Astar that it was unlikely to reach the pipeline cannot be accepted as the results and analysis of DW3 was presented but not the model itself as confirmed by DW3. As stated by DW3, there was no way to test what he was saying although the model was readily available in the website (NOP 21-6-2018/76-78).

[31] It was not as contended by the defendants that the damage was due to the missing HSS at Z75 leading there to be no protection from corrosion. This is because, PW7 in her comments dated 6 March 2018 on Astar's report had stated that "The HSS for FJZ75 was found missing after pipe rupture due to the constant high pressure exerted by the gas which due to its lightweight was blown away. Corrosion attack was localised only at the 6-7 o'clock which indicates that the HSS was present otherwise the whole circumference of the unprotected joint would similarly corrode". Contrary to the defendants' contention, PW7 had not stated the missing HSS as being the cause of the rupture of the damaged pipe, what was stated was only that a loose or missing HSS would not be able to protect the external surface of the pipeline. It was always her evidence the HSS was found missing and that it was present when corrosion happened at the 6-7 o'clock. As to it being illogical for the residue to be at the top but nothing at the bottom, this was explained as due to the high pressure of the gas which scrubbed it clean and there being less pressure at the top (NOP 6-6-2018/56-57 and 63).

[32] The next contention raised was human intervention removing the HSS sometime between 2012-2015. This however was not borne out by the evidence. On the contrary, the shrink sleeve installation report in B16 shows the HSS was installed at Z74 and Z75. There was no evidence of any repair work carried out on Z75 before the first leaking incident such that the workers had failed or omitted to install the HSS. The evidence of PW2 that there must have been some work done was in relation to what happens in the sequence of repair. This can clearly be seen when the question was asked of him to "walk through the sequence of repair ... what do you do?" (NOP 11-3-2018/113).

[33] As to there being a cut and re-weld previously done by the plaintiff, PW7 had explained why it was not so. This was because the cut was very clean, there were no signs of weld splatter and the morphology of the flow of gas was not consistent with a cut and re-weld (NOP 20-5-2018/84).

[34] Further Z74 which had HSS was also damaged.

[35] Another contention was that since Z74 was nearer to the factory than Z75, then Z74 should have ruptured first instead of Z75 if there was discharge of acidic industrial effluent from the factory. This was not tenable as DW3 confirmed that it was possible for the industrial effluent to reach Z75 first before depending on the groundwater flow velocity and the discharge flow rate. The evidence can be seen in NOP 21-6-2018/66-67.

[36] It was also not probable for the damage to have been caused by the naturally acidic conditions of the soil from the re-vegetation of former palm oil plantations. Over and above the reasons set out above, if this was indeed the situation the PGU wherever it runs through palm oil plantations would have anomalies with their pipelines. But that was not the case where PW2 had stated he had never through his 18 years of dealing with pipeline integrity come across a rupture due to corrosion as in this case and that the pigging report in B11 does not show anomalies of the pipeline passing through palm oil plantations (NOP 11-3-2018/87-89).

Finding On The Causes Of Action

[37] Arising from the above, the plaintiff has proved its claim against the defendants on negligence, trespass and private nuisance.

Negligence

[38] It is trite law that three elements must be established in a claim for negligence namely duty of care, breach, loss and damage. The defendants owed a duty of care to the plaintiff as the owner or occupier of the adjoining land. *Clerk & Lindsell on Torts* at p. 97 has this to say:

> If the defendant knew or ought to have known that in consequence of his conduct harm to his neighbour was reasonably foreseeable, he is under a duty of care to prevent such consequences as are reasonably foreseeable.

> In such case the defendant is liable because he is considered negligent in relation to his neighbour, and here nuisance and negligence coincide. Whether his liability is described as falling under one legal rubric or the other would seem to be only a difference of words.

[39] Here, the defendants had breached its duty of care when it failed to take reasonable care in preventing highly acidic industrial effluent from being discharged into the plaintiff's land. In fact, DW2 admitted that the defendants did not run the wastewater treatment plant well and that it had failed to comply with the regulations imposed on them which resulted in the DOE charging the first defendant for *inter alia* discharging highly acidic industrial effluent into inland waters. Furthermore, the defendants had also deliberately, without obtaining the plaintiff's permission, encroached and/or trespassed onto the plaintiff's land to construct the fitting for the sole purpose of discharging untreated industrial effluent in contravention of the EQA. In addition, the defendants had not taken care of the fitting which had a broken outside sump as well as the inside sump which had cracks in the acid-resistant fibre glass lining.

[40] The breach of this duty of care led to damage to the damaged pipe.

Trespass

Halsbury's Law's of England (3rd edn) Vol. 38 define trespass to land as follows:

> Every unlawful entry by one person on land in the possession of another is a trespass for which an action lies, although no actual damage is done. A person trespasses upon land if he wrongfully sets foot on, or rides or drives over it, or takes possession of it, or expels the person in possession, or pulls down or destroys anything permanently fixed to it, or wrongfully takes minerals from it, or places or fixes anything on it or in it, or, it seems, if he erects or suffer to continue on his own land anything which invades the airspace of another, or if he discharges water from another's land, or sends filth or any injurious substance which has been collected by him on his own land on to another's land.

[41] In the old case of *Ellis v. Loftus Iron Co* [1874] LR 10 CP 10 at p. 12 it was stated that:

> … if the defendant place a part of his foot on the plaintiff's land unlawfully, it is in law as much a trespass as if he had walked half a mile on it.

[42] In this instant case, DW2 had stated to constructing the fitting on the plaintiff's land without consent and discharging the industrial effluent from the fitting.

Private Nuisance

[43] Private nuisance is the unreasonable interference with another's use or enjoyment to the land (*Projek Lebuh Raya Utara-Selatan Sdn Bhd v. Kim Seng Enterprise (Kedah) Sdn Bhd* [2013] 6 CLJ 958; [2013] 5 MLJ 360, 393).

[44] *Clerk & Lindsell on Torts* (17th edn) at p. 909 explains the distinction between trespass and nuisance as follows:

> Trespass is a direct entry on the land of another, and is actionable *per se*, without proof of special damage, but nuisance is the infringement of the plaintiff's interest of the property without direct entry by the Defendant, and generally actionable only on proof of special damage. For example, to build a wall partly on the land of another is a trespass, but to build on one's own land a wall which, through disrepair, falls on to another's land is nuisance. It is a trespass for A directly to discharge water on to B's land, but if water spills from A's land over intermediate land be onto B's land this amount to a nuisance. Such a distinction may be on certain facts an exceeding fine one. But the distinction will not normally become vital to the plaintiff's claim where he can allege and prove special entry by way of trespass. It is a nuisance and not a trespass if the branches of a tree, whether planted or self-sown, growing on the land of one man.

[45] Given that the defendants have been found liable on trespass which is actionable *per se* without proof of special damage, this head of claim is at best, in the alternative.

Strict Liability

[46] The defendants are also liable under the rule of strict liability as established in *Rylands v. Fletcher* (1866) LR 1 Ex 265 where at p. 279 it was stated:

> We think that the true rule of law is, that the person who for his own purpose brings on his lands and collects and keeps there anything likely do to mischief if it escapes, must keep it in at his peril, and, if he does not do, is *prima facie* answerable for all the damage which is the natural consequence of its escape. He can excuse himself by shewing that the escape was owing to the plaintiff's default; or perhaps that the escape was the consequence of vis major, or the act of God; ...

[47] It is also recognised there must be a non-natural use of the land where it has to be "some special use bringing with it increased danger to others and must not merely be the ordinary use of the land or such a use as is proper for the general benefit of the community" (*Hiap Lee (Cheong Leng & Sons) Brickmakers Ltd v. Weng Lock Mining Co & Ltd* [1974] 2 MLJ 1).

[48] In this instant case, the collection of highly acidic industrial effluent in the inside sump amounts to the accumulation on the defendant's land of something likely to do mischief if it escapes. The act of constructing and using a by-pass to avoid industrial effluent from being treated in the WWTP and instead diverting to nearby inland waters through the construction of the fitting on the plaintiff's land clearly amounts to the non-natural use of the defendant's land. Arising from the aforesaid actions, the defendants are liable under the strict rule in *Rylands v. Fletcher* (*supra*).

Legal Basis Of The Second Defendant's Liability

[49] The court had earlier found that the second defendant was liable as was the first defendant. It was contended that the second defendant ought not to be liable and two cases were relied on.

[50] The first case of *Law Kam Loy & Anor v. Boltex Sdn Bhd & Ors* [2005] 3 CLJ 355 primarily dealt with lifting of the corporate veil which was not the plaintiff's pleaded case. The issue was whether the second defendant was involved in the first defendant's factory operations such that it will be liable as was the first defendant.

[51] The second case was *Lucky Alame & Ors v. Royal Dutch Shell Plc & Shell Petroleum Development Company of Nigeria Ltd & Anor Appeal* [2018] EWCA Civ 191. The first defendant, RDS is a company incorporated in the United Kingdom and is the parent company of the Shell group of companies (the Shell Group). The second defendant (SPDC) is an exploration and production company incorporated in Nigeria, and is a subsidiary of RDS. This was a claim for damages arising as a result of serious, and ongoing, pollution and environmental damage caused by leaks of oil from pipelines and associated infrastructure in and around the Niger Delta. The claim against RDS is brought on the basis that RDS owed the claimants a duty of care either because it controlled the operation of pipelines and infrastructure in Nigeria from which the leaks occurred or because it had assumed a direct responsibility to protect the claimants from the environmental damage caused by the leaks.

[52] As against RDS, the area of dispute related to proximity which five main factors were used by the claimants to demonstrate RDS's arguable control of SPDC's operations: (1) the issue of mandatory policies, standards and manual which applied to SPDC, (2) the imposition of mandatory design and engineering practices, (3) the imposition of a system of supervision and oversight of the implementation of RDS's standards which bore directly on the pleaded allegations of negligence, (4) the imposition of financial control over SPDC in respect of spending which, again, was directly relevant to the allegations of negligence and (5) a high level in the direction and oversight of SPDC's operations.

[53] However, none of those factors were put forth to the witnesses and could not therefore assist the second defendant.

[54] In so far as the cause of action in negligence goes, there was control over the second defendant in the facts as established by the evidence which the court had relied on earlier in determining involvement of the second defendant.

[55] The plaintiff's claim was also premised on strict liability which is a question of who owns the land and that was the second defendant. Here, there had been escape of the industrial effluent from the second defendant's land.

Damages

[56] As per its re-amended statement claim in para. 46, the loss and damage incurred by the plaintiff was as follows:

(1)	Cost of remedial works consumable items and raw materials	RM1.590 million
(2)	Cost of the plaintiff's man-hours expended	RM 732,272
(3)	Cost of replacement of the damaged pipe	RM 75,594
(4)	Cost of pigging works	RM 31,881
(5)	Cost of permanent repair works on the said pipeline	RM 585,566
(6)	SIRIM's Report	RM 66,780
(7)	Ramboll's Report	RM 136,850
(8)	Es Techventure's Report	RM 6,940
(9)	Cost of land clearing	RM2,938,676.58
		RM6,164,919.58

[57] The first defendant submitted the plaintiff had failed to prove loss and damage for items (1), (2), (3), (5) and (9). The thrust of its submission was that the documents relied on for quantum could not in themselves prove anything and that the relevant persons such as those from the finance department or Zulkifli Ayub who had knowledge of the man-hours ought to have been called. This was because PW2 and PW5 who gave evidence on damages did not know what the documents produced were and that PW5's role was merely to compile the documents and submit to the legal department.

[58] It was PW2's evidence that he instructed for rectification works to be carried out to the pipeline and he then listed the costs of such work (Q&A 7 WSP2). In his supplemental evidence, he stated the cost paid on remedial work, consumable items and raw material was RM1.590 million after negotiation and not RM1.984 million (NOP 11-3-2018/93).

[59] PW5 also gave evidence on the damages suffered by the plaintiff where his knowledge was limited to the cost of remedial works, cost of replacement of the damaged pipe, cost of permanent repair work on the pipeline and cost of appointing experts for the trial.

Cost Of Remedial Work

[60] The cost of remedial work was derived from the tax invoice issued by PBJV group (C2/1). As explained by PW5 in Q&A 6 to 9 WSP5, the contract was entitled "Procurement, Construction and Commissioning (PCC) of Pengerang Gas Pipeline (PGP)" (Pengerang contract) whereas the

description of the scope of works was for a claim for PGU II pipeline repair at Ulu Tiram, Johor amounting to RM1,590,000 (inc. GST). Notwithstanding the contract title, this tax invoice was for repair works done on the damaged pipe. The reason as to why the contract title was for Pengerang contract was because the plaintiff had previously entered into a contract with PBJV to contract a new pipeline located in Pengerang. During the time of the first leaking incident, the plaintiff also appointed PBJV to perform the remedial works on the damaged pipe primarily because PBJV was already undertaking work relating to the Pengerang contract which was located near to the leakage site. As a matter of convenience, the tax invoice was issued under the umbrella of the Pengerang contract.

[61] PW5 also stated he was able to ascertain the type of work done under that tax invoice by counter referring to the PO number in C2/2. According to him the PO number and the tax invoice corresponded (NOP 11-3-2018/103-104).

[62] It was explained to the court's satisfaction why PBJV was appointed to do remedial work as this was an emergency situation and PBJV was already in the vicinity working on the Pengerang contract. It was thus not necessary for the contract to be produced to the court. On the breakdown of RM1.590 million, this was a negotiated figure where the initial cost of RM1.984 million and the cost of consumables were provided in B7/1-46 and 81, as per PW2's evidence in NOP 11-3-2018/92-94.

[63] As to there being no proof that the tax invoice of RM1.590 million was paid to PBJV, this was not raised during cross-examination such that the defendants cannot now assert there was no such payment. The oft-cited case of *Aik Ming (M) Sdn Bhd & Ors v. Chang Ching Chuen & Ors And Another Case* [1995] 3 CLJ 639; [1995] 2 MLJ 770 comes to mind that a party's case has to be expressly put to the opponent's material witness under cross-examination and failure to do so bars that party from raising it in argument.

Cost Of Man-hours Expended

[64] It was PW2's evidence that the cost of man-hours expended was in B7/tab 3, at pp. 79 to 80. In his supplemental evidence, he stated that these were all plaintiff's personnel. In relation to PW1 (Farid) for whom the plaintiff was also claiming man-hours, the man-hours rate of RM100 was a standard rate for external services besides the normal routine job and this is based on B7/80. As to what was meant by external services, he answered:

> The external services, some sort like the ad hoc work beside the standard routine that we perform beside the monthly salary. I mean, for this case is ad hoc what we call, request by third party for example.

[65] As to how it was relevant to the case, he stated:

> This incident is the abnormal situation. It's not a routine core work for the, for me and other staff. And then, we cannot perform the normal, what we called, core works beside the normal core works that we apply for the monthly salary.

[66] When asked how it was possible to claim 20 hours for 5, 6, 7 and 8 October, he said this was because the repair work was performed around the clock with rest for only certain hours such as lunch, break and so on (NOP 11-3-2018/96). In cross-examination when asked specifically on when the first person in B7/79, one Norarniza had been paid the sum of RM52,080 he said he was not sure because he's not from finance and the same too for the rest of those in the same page. There was no document to show payment of the total amount (All in NOP 11-3-2018/98-99).

[67] With regard to the contention there was no proof of payment to the personnel listed in B7/79, the basis of the claim is not that the money was paid out but that these were the charge-out rate which the plaintiff would have charged a third party had its personnel been working on site for a third party. This has been sufficiently explained by PW2 which the court referred to earlier as to what he meant by external service and its relevance to the case. The claim for 20 hours was also not unusual or unreasonable given the emergency situation and the need to work round the clock.

[68] As proof of payment is not the issue, it was not necessary for someone from finance or the person who prepared B7/79 Zulkifli Ayub to give evidence. PW2 being the person who instructed the repairs is well-positioned to do so.

Cost Of Replacement Of The Damaged Pipe

[69] From the evidence of PW5, the damaged pipe was replaced with spare part which had been kept in storage. The cost of replacement came from the commercial proposal dated 1 April 2016. The estimated cost of replacement of the damaged pipe (RM75,954) came from a commercial proposal dated 1 April 2016 by Maximum Expansion Sdn Bhd (Maximum, B7/82). He e-mailed Maximum and obtained the quotation. The commercial proposal was based on obtaining a pipe with the same size, thickness, material and grade as the replacement pipe which they used during repairs. The quotation was obtained solely to ascertain the value of the pipe which had been used for the replacement. No actual purchase was made of a new pipe to replenish their stores. Refer to Q&A 10-12 WSP5.

[70] The contention was that there was no proof the commercial proposal was accepted or that the replacement pipe was purchased.

[71] However, as explained by PW5, there was no purchase but a quotation obtained to determine the value of the pipe used for the replacement. The proposal obtained was on the same size, thickness, material and grade as the pipe used for the replacement. It follows that the proposal from Maximum

would provide the market value for the spare replacement pipe. This would have been the price paid were the plaintiff to purchase one if it had no spare replacement pipe.

Cost Of Permanent Repair Work On The Pipeline

[72] PW5 explained in his Q&A 13 to 16 WSP5 that the cost of permanent repair work for Z75 was RM292,783 as in B7/92-97 and not RM254,093 as originally pleaded and the cost of permanent repair work on Z74 had been omitted. The cost should be RM292,783 per joint and the total would be RM585,566 as shown in Appendix A to his witness statement. He referred to B/97 for which the tax invoice was for work done on KP 182 and KP 197.

[73] After the first leaking incident, the plaintiff's engineers along with representatives from ingress fabricators visited the pipeline and prepared a list of quantities for the required materials and workmanship needed to repair the damage pipe. Once there was mutual agreement on the list, the plaintiff issued a purchase order which included the cost of permanent repair work on the damaged pipe as well as several other repairs on different pipelines. The cost of multiple repairs was consolidated into a single purchase order for the sake of convenience.

[74] PW6 adopted PW5's paras. 13 to 16 of WSP5 and added the following in Q&A 5 of WSP6:

(a) The permanent repair works for KP 197 (Field Joint Z74 and Z75) were carried out between June to August 2016. I was on-site throughout this period.

(b) After the completion of the permanent repair works, Ingress Fabricators Sdn. Bhd. then issued an invoice dated 29 December 2016 totalling RM903,890.80 as in B7/97.

(c) He confirmed that he was present on site and witnessed the division of the materials and labour as specified in Appendix-A of WSP5.

(d) Pursuant to the invoice, the actual costs incurred for the repair works for KP 197 and KP 182 are as follows:

(i) Field Joint Z74: RM292,783.00

(ii) Field Joint Z75: RM292,783.00

(iii) KP 182: RM318,324.80

[75] The evidence of both PW5 and PW6 was that by looking at B7/97 they would not be able to tell the breakdown of the amount for joint Z74 and Z75. Be that as it may, PW5 explained, he was able to tell which portion of the work was ascribed to KP 197 or 182 by referring to his Appendix A. So for item A mobilisation and the item excavation, he personally knew the one quantity was for Z75 and Z74 and the price of RM3,800 was from B7/94-6 and the same too for items A1-A5 and B1-7. (NOP 20-5-2018/99-102).

[76] PW6 was able to confirm with reference to B7/91 which was the payment to the contractor the amount specific to KP 197 was as in his WSP6, para. 5d(i) and (ii) (NOP 6-6-2018/2018). Further PW6 was present on site and witnessed the division of the material and labour as specified in WSP5, Appendix-A.

[77] The collective evidence of PW5 and PW6 was able to point towards the cost of the permanent repair work required for Z74 and Z75 at KP 197.

Admissibility Of The Documents To Prove The Heads Of Claim In Sub-paras (1) To (4) Above

[78] At the outset, it must be noted that all the bundles of documents tendered during trial and not just the documents on damages in particular B7 and C2 were marked as part B. It trite that for part B documents, the maker need not be called as witness. The weight of the evidence is another matter and may be challenged by the other party.

[79] The defendants relied on *Sabah Shell Petroleum Co Ltd & Anor v. The Owners Of And/Or Any Other Persons Interested In The Ship Or Vessel The 'Borcos Takdir* [2012] 1 LNS 1116; [2012] 5 MLJ 515 (*Borcos Takdir*) to support the proposition that the documents on damages were hearsay evidence and that the relevant persons such as from finance department ought to have been called. However, as submitted by the plaintiff's counsel which this court accepted, the investigation report in *Borcos Takdir* (*supra*) were held to be documentary hearsay not because their authors had failed to be called as witnesses, but rather because the testimony of the authors of the investigation report themselves could not serve as evidence for the truth of what the ship master had done during the time of the incident:

> [45] It follows that the fact that the reports prepared by witnesses such as PW1, as well as the authors of all the other incident reports equally amount to documentary hearsay. The fact that they set out in writing the content of their interviews with the master and other crew members in no way alters the nature and evidential value of those reports. They cannot comprise evidence of the truth of the events which occurred at the time of the incident for the purpose of ascertaining the precise cause of the incident.

[80] In our instant case, the claims were proven through the documents and the evidence of PW2, PW5 and PW6. The court had set out their relevant evidence in the relevant subparagraphs above. In particular, PW2 had authorised the repair work and PW6 was present at the time of the execution of the permanent repair work. Hence the documents in question were not documentary hearsay.

Remaining Loss And Damage

[81] There was no issue on the other heads of claim as follows:

(a) Cost of pigging work	-	Invoice in B7/84 and payment in B7/83;
(b) SIRIM's report	-	B7/87-90;
(c) Ramboll's report	-	B14/7-11 and
(d) ES Techventure's report	-	B14/2-6

Cost Of Land Clearing

[82] This claim was dismissed as there was no evidence of such work being carried out. Going by the plaintiff's submission dated 17 August 2018 at para. 145 it was stated "At some point in time, the contaminated site will have to be cleared of the contaminants by land clearing". The estimated cost is as per B7/103-104. The work was thus not done.

Aggravated, Exemplary Or Punitive Damages

[83] This claim was dismissed as there was no proof of the *Rookes v. Barnard* [1964] AC 1129 category of a conduct calculated to result in profit.

Conclusion

[84] For the reasons given above, the plaintiff's claim against the first and second defendant was allowed. The court allowed the claim for loss and damages for all the items set out in para. 46(1) to (8) other than (9).

[85] The plaintiff's claim in paras. 47(1) to (5), (8) and (9) was allowed and on (5) with interest at the rate of 5% and the rest not allowed.